

REMARKS

Claims 22-38 are pending in the application.

Claims 22, 23, 28, 37 and 38 are rejected under 35 U.S.C. § 102(e).

Claims 24-27 are rejected under 35 U.S.C. § 103(a).

Claims 29-36 are allowed.

Claims 22 and 38 are amended.

No new matter is added.

Applicants request reconsideration and allowance of the claims in light of the following remarks.

Summary of Applicant-Initiated Examiner Interview

Per 37 CFR § 1.133(b), the following is a brief summary of the Examiner interview conducted on May 3, 2007 via telephone between Applicants' representative, Kurt Eaton, and Examiner Matthew E. Warren.

No exhibits were shown or demonstrations conducted. Claims 22 and 38 were discussed. The only reference discussed was U.S. Patent No. 6,921,947 issued to Furuta, et al. (hereinafter "Furuta").

During the interview, the Examiner clarified the interpretation given to Furuta with respect to the rejection of claims 22 and 38, particularly how a corner region formed in the center of the isolation insulating film 2 can be interpreted as reading on the "bottom corner" and the "bottom portion" as variously recited in claims 22 and 38. Applicants respectfully disagreed with the interpretation given to Furuta and the Examiner suggested an amendment to claims 22 and 38 that would overcome the rejection of the claims under Furuta. To expedite prosecution of the present application, Applicants hereby amend claims 22 and 38 to variously recite, as suggested by the Examiner, wherein the bottom corner (or bottom region) of the step region (or first step region) faces toward a center of the second active region.

Claim Rejections – 35 U.S.C. § 102

Claims 22, 23, 28, 37 and 38 are rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by Furuta. Applicants respectfully traverse this rejection.

Amended claim 22 recites, among other elements, “wherein the bottom corner of the step region faces toward a center of the second active region.” Amended claim 38 recites, among other elements, “wherein the bottom portions of the first step region and the adjacent step region face toward a center of the second active region.” Support for these amendments can be found at, for example, FIG. 13 of the specification as originally filed. Applicants respectfully submit that Furuta fails to teach or suggest at least these elements as variously recited in claims 22 and 38.

For example, the Advisory Action interprets the corner region formed in the center of the isolation insulating film 2 as reading on the “bottom corner of the step region” recited in claim 22 and the “bottom portion of the first step region” recited in claim 38. The Advisory Action also acknowledges that the corner region shown in FIG. 14 of Furuta “faces away from the channel implant region [5A].” However, because FIG. 14 of Furuta shows wherein the aforementioned corner region faces away from the channel implant region 5A, Applicants respectfully submit that Furuta cannot be relied upon as teaching wherein the corner region faces toward a center of the channel implant region 5A. Because FIG. 14 of Furuta does not show wherein the corner region faces toward a center of the channel implant region 5A, Furuta does not teach or suggest “wherein the bottom corner of the step region faces toward a center of the second active region,” as recited in claim 22 or “wherein the bottom portions of the first step region and the adjacent step region face toward a center of the second active region,” as recited in claim 38.

For at least the reasons presented above, Applicants respectfully submit that Furuta does not show the inventions recited in amended claims 22 and 38, in as complete detail as is contained in amended claims 22 and 38, and therefore does not anticipate amended claims 22 and 38. See M.P.E.P. § 2131.

Claims 23, 28 and 37 depend from claim 22 and, therefore, include each and every element recited in claim 22. Accordingly, Applicants respectfully submit that Furuta fails to anticipate claims 23, 28 and 37 for at least the reasons presented above with respect to claim 22.

Claim Rejections – 35 U.S.C. § 103

Claims 24-27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Furuta and further in view of U.S. Patent No. 6,642,105 issued to Kim, et al. (hereinafter “Kim”).

Applicants respectfully traverse this rejection.

Claims 24-27 depend from claim 22 and, therefore, include all of the elements recited in claim 22. As established above, claim 22 is neither anticipated, nor rendered obvious, by Furuta. Kim does not supply any teaching which, when combined with Furuta, renders claim 22 obvious. Accordingly, Applicants submit that claims 24-27 are in condition for allowance for at least the same reasons given with respect to the rejection of claim 22.

Allowable Subject Matter

Applicants appreciate the allowance of claims 29-36.

CONCLUSION

For the foregoing reasons, Applicants request reconsideration and allowance of claims 23-38 of the application as amended. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Respectfully submitted,

MARGER JOHNSON & McCOLLOM, P.C.



Hosoon Lee
Reg. No. 56,737

MARGER JOHNSON & McCOLLOM, P.C.
210 SW Morrison Street, Suite 400
Portland, OR 97204
503-222-3613
Customer No. 20575